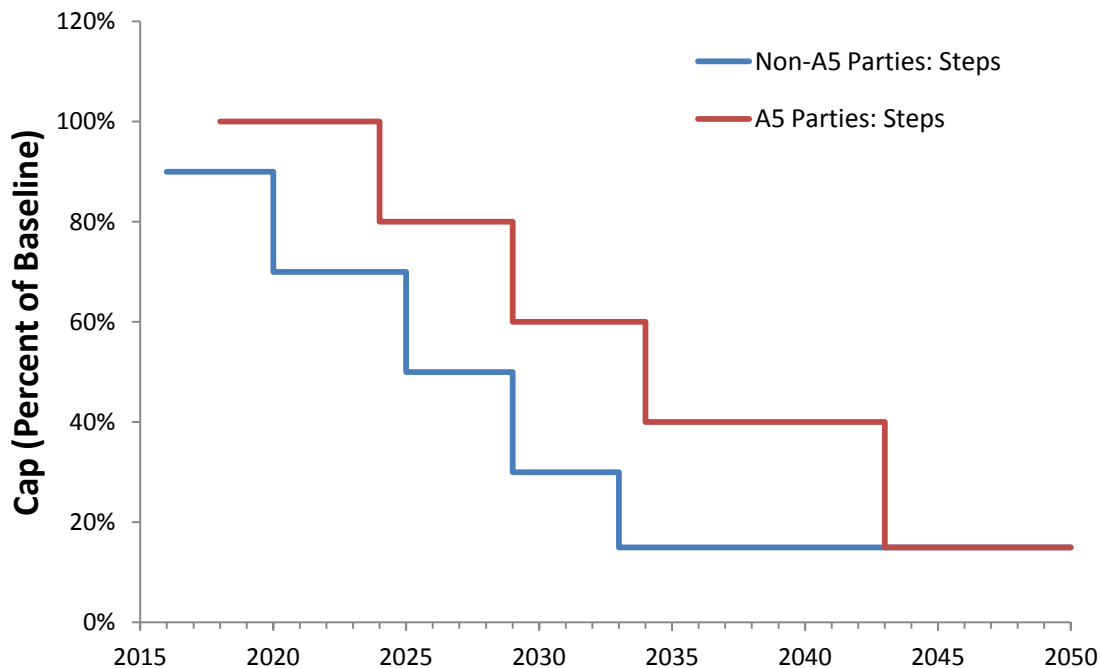


Summary Points: North American HFC Submission to the Montreal Protocol

Key elements of the North American proposal:

- Lists 21 HFCs as a new Annex F, including two substances sometimes referred to as HFOs.
- Recognizes that there may not be alternatives for all HFC applications and therefore utilizes a gradual phasedown mechanism with a plateau, as opposed to a phaseout.
- Establishes provisions for developed country (non-Article 5) and developing country (Article 5) phasedown of production and consumption (see figure below).
 - The baseline for Article 5 countries is calculated based on HCFC consumption and production respectively averaged over years 2005-2008, recognizing there are HFC data limitations in some countries.
 - For non-Article 5 countries, the baseline is determined from a combination of HFC plus 85% of HCFC consumption and production respectively averaged over years 2005-2008.
 - Uses weighting by Global Warming Potential for HCFCs and HFCs as compared to typical Montreal Protocol practice of Ozone Depleting Potential.

HFC Reduction Steps for Article 5 and Non-Article 5 Countries (% of baseline)



- Includes provisions to limit HFC-23 byproduct emissions resulting from the production of HCFC-22 in each production line beginning in 2016. The provisions are intended for production lines that do not have an approved project under the Clean Development Mechanism to control emissions of HFC-23.
- Requires licensing of HFC imports and exports, and bans imports and exports to non-Parties.
- Requires reporting on production and consumption of HFCs, and HFC-23 byproduct emissions.

- Makes eligible for funding under the Montreal Protocol's Multilateral Fund the phasedown of HFC production and consumption as well as the reduction of HFC-23 byproduct emissions.

Potential Steps for Non-A5 Parties		Potential Steps for A5 Parties	
2016	90%	2018	100%
2020	70%	2024	80%
2025	50%	2029	60%
2029	30%	2034	40%
2033	15%	2043	15%

Cumulative Environmental Benefits:

- Cumulative benefits of the HFC phasedown estimated by the U.S. Government amount to reductions of 2,200 million metric tons of carbon dioxide equivalent (MMT CO₂eq) through 2020, and about 85,000 MMTCO₂eq through 2050.
- Cumulative benefits from HFC-23 byproduct emissions controls as estimated by the U.S. Government amount to an additional 11,300 MMTCO₂eq through 2050.

Cumulative HFC Reductions (MMTCO ₂ eq) 2016-2050	
Non-Article 5	42,100
Article 5	42,900
World	85,000
Byproduct Controls (HFC-23)	11,300
World Total	96,300

Relationship to HCFC phaseout:

- This amendment is designed to be compatible with the HCFC phaseout.
- The proposal recognizes that HFCs are alternatives in many existing HCFC applications, so baseline levels are set to accommodate some level of transition from HCFCs to HFCs.
- The suite of known alternative chemicals, new technologies, and improved process/handling practices can significantly reduce HFC consumption while simultaneously supporting the HCFC phaseout.

Relationship with the United Nations Framework Convention on Climate Change (UNFCCC):

- The proposal is intended to support overall global efforts aimed at climate system protection.
- The proposal constitutes an amendment to the Montreal Protocol and could be complemented by a related decision by the UNFCCC confirming the Montreal Protocol approach.
- The proposal leaves unchanged the provisions of the UNFCCC/Kyoto Protocol that govern HFC emissions. Parties could follow Montreal Protocol obligations to meet certain UNFCCC obligations.